
EXHIBIT 5

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

**CELLULAR COMMUNICATIONS
EQUIPMENT LLC,**

Plaintiff,

V.

HTC CORPORATION, ET AL.,

Defendants.

Case No. 6:13-cv-507

CONSOLIDATED LEAD CASE

MEMORANDUM OPINION AND ORDER

This Memorandum Opinion construes the disputed claim terms in United States Patent Nos. 6,819,923 (“the ’9923 Patent”), 6,810,019 (“the ’019 Patent”), 7,941,174 (“the ’174 Patent”), 8,055,820 (“the ’820 Patent”), and 7,218,923 (“the ’8923 Patent”), asserted in this suit by Plaintiff Cellular Communications Equipment LLC. Also before the Court is Defendants’ Motion for Summary Judgment of Indefiniteness (Docket No. 287).

On December 16, 2014, the parties presented oral arguments on the disputed claim terms and on the Motion for Summary Judgment at a *Markman* hearing. For the reasons stated herein, the court **ADOPTS** the constructions set forth below and **DENIES** Defendants’ Motion for Summary Judgment.

BACKGROUND

Plaintiff alleges that Defendants, a group of mobile device manufacturers and mobile network carriers, infringe the five patents asserted here. The patents-in-suit were acquired from Nokia Siemens Networks and generally relate to mobile communications, such as the UMTS, GSM, and LTE wireless standards. Docket No. 277 at 1. This Memorandum Opinion reflects

the Court’s claim constructions and indefiniteness rulings regarding the terms presented at the first of two *Markman* hearings scheduled in this case.

APPLICABLE LAW

Claim Construction

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313–1314; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language guides the Court’s construction of claim terms. *Phillips*, 415 F.3d at 1314. “[T]he context in which a term is used in the asserted claim can be highly instructive.” *Id.* Other claims, asserted and unasserted, can provide additional instruction because “terms are normally used consistently throughout the patent.” *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). “[T]he

specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning that it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. For example, “[a] claim interpretation that excludes a preferred embodiment from the scope of the claim ‘is rarely, if ever, correct.’” *Globetrotter Software, Inc. v. Elam Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” the Court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

Where a claim limitation is expressed in means-plus-function language and does not recite definite structure in support of its function, the limitation is subject to 35 U.S.C. § 112 ¶ 6. *Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). In relevant part, § 112 mandates that “such a claim limitation be construed to cover the corresponding structure . . . described in the specification and equivalents thereof.” *Id.* (citing 35 U.S.C. § 112 ¶ 6.). Accordingly, when faced with means-plus-function limitations, courts “must turn to the written description of the patent to find the structure that corresponds to the means recited in the [limitations].” *Id.*

Construing a means-plus-function limitation involves two inquiries. The first step requires “a determination of the function of the means-plus-function limitation.” *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). Once a court has determined the limitation’s function, “the next step is to determine the corresponding structure

disclosed in the specification and equivalents thereof.” *Id.* A structure is corresponding “only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Id.* Moreover, the focus of the corresponding structure inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is “clearly linked or associated with the [recited] function.” *Id.*

Summary Judgment

“Summary judgment is appropriate in a patent case, as in other cases, when there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law.” *Nike, Inc. v. Wolverine World Wide, Inc.*, 43 F.3d 644, 646 (Fed. Cir. 1994); FED. R. CIV. P. 56(c). The moving party bears the initial burden of “informing the district court of the basis for its motion” and identifying the matter that “it believes demonstrate[s] the absence of a genuine issue of material fact.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). If the moving party meets this burden, the nonmoving party must then set forth “specific facts showing that there is a genuine issue for trial.” FED. R. CIV. P. 56(c); *see also T.W. Elec. Serv., Inc. v. Pac. Elec. Contractors Ass’n*, 809 F.2d 626, 630 (9th Cir. 1987).

A party seeking to invalidate a patent must overcome a presumption that the patent is valid. *See* 35 U.S.C. § 282; *Microsoft Corp. v. i4i Ltd. P’ship*, 131 S. Ct. 2238, 2243 (2011); *U.S. Gypsum Co. v. Nat’l Gypsum Co.*, 74 F.3d 1209, 1212 (Fed. Cir. 1996). This presumption places the burden on the challenging party to prove the patent is invalid by clear and convincing evidence. *Microsoft*, 131 S. Ct. at 2243; *U.S. Gypsum Co.*, 74 F.3d at 1212.

A claim is invalid for indefiniteness under 35 U.S.C. § 112 ¶ 2 if it fails to particularly point out and distinctly claim the subject matter that the applicant regards as the invention. The

party seeking to invalidate a claim as indefinite must show by clear and convincing evidence that the claim, viewed in light of the specification and prosecution history, does not “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129, 2130 n.10 (2014).

CONSTRUCTION AGREEMENTS

The parties have submitted the following agreements (Docket No. 245 at 1–2):

Term	Agreed Construction
“means for receiving a neighbor cell information message” ('9923 Patent, Claim 11)	<p>The parties agree this is a means-plus-function element to be construed in accordance with 35 U.S.C. 112(6).</p> <p>The parties further agree that the function is “receiving a neighbor cell information message.”</p> <p>The parties do not agree regarding the structure.</p>
“means for associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell” ('9923 Patent, Claim 11)	<p>The parties agree this is a means-plus function element to be construed in accordance with 35 U.S.C. 112(6).</p> <p>The parties further agree that the function is “associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell.”</p> <p>The parties do not agree regarding the structure.</p>

<p>“processing means for arranging gaps in a time-slot frame according to the measurement pattern definitions” ('019 Patent, Claim 11)</p>	<p>The parties agree this is a means-plus function element to be construed in accordance with 35 U.S.C. 112(6).</p> <p>The parties further agree that the function is “arranging gaps in a time-slot frame according to the measurement pattern definitions.”</p> <p>The parties do not agree regarding the structure.</p>
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In view of the parties’ agreements on the proper functions for these terms, the Court **ADOPTS** these proposed functions.

DISPUTED TERMS IN THE '9923 PATENT

The '9923 Patent, titled “Method for Communication of Neighbor Cell Information,” issued on November 16, 2004 and bears a priority date of December 16, 1998. The Abstract of the '9923 Patent states:

The invention is related to signaling in cellular telecommunication systems, namely to reduction of resources used by signaling. According to the invention, a list of neighbor cell information is communicated to a mobile station in compressed form. Preferably, the neighbor cell information list is transmitted in such a way, that a table reciting parameter values in use by the neighboring cells, and for each of these cells, each value listed in the table is represented by a pointer such as an index to the table. In this way, same parameter values do not need to be repeated for each cell using the same values. The neighbor cell information list can be further compressed by expressing a first frequency parameter value in the normal way, but expressing further frequency parameter values relative to the first, or as in a further embodiment, relative to the previous frequency parameter value. Such ways of representing frequency values allow the use of fewer bits to represent the frequency values.

A. “means for receiving a neighbor cell information message” (Claim 11)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Function: “receiving a neighbor cell information message” Structure: “an antenna, a receiver, and a microprocessor (1:34-47; 2:4-7; 6:19-61; Fig. 7), and equivalents thereof (no special algorithm required)”	Indefinite Function: “receiving a neighbor cell information message” Structure: No corresponding structure (algorithm) disclosed

The parties agree that this term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6 but disagree as to the structure disclosed in the specification. Plaintiff argues that “the structure for performing the claimed function is a combination of hardware (an antenna, receiver, and microprocessor), and no algorithm is required.” Docket No. 277 at 6–7. Plaintiff contends that “the link between ‘receiving’ a message, on the one hand, and the ‘receiver’ and ‘antenna’ described in the patent, on the other hand, is self-evident to” a person skilled in the art. *Id.* at 7. Alternatively, Plaintiff argues that “even if the supporting structure was simply a processor (without an antenna and receiver), the claimed function — ‘receiving’ a message — is so basic that it may be performed by any general-purpose computer, and no special algorithm is necessary.” Docket No. 277 at 7.

Defendants contend that the claim is indefinite because “[t]he specification clearly links the claimed function . . . to means 410 shown in Figure 7” but “provides no detail regarding this generic software program or its underlying algorithm.” Docket No. 288 at 22–23 (internal quotation marks omitted). Defendants emphasize that the specification does not link the disclosed receiver, antenna, or microprocessor to the function of receiving a neighbor cell information message. *Id.* at 23. Whereas these elements may be disclosed for receiving signals

generally, Defendants argue, “the claimed function is not merely ‘receiving,’ but ‘receiving a neighbor cell information message.’” *Id.* at 24.

Claim 11 of the '9923 Patent recites (emphasis added):

11. A mobile communication means for communication with a cellular telecommunication network, comprising:

means for receiving a neighbor cell information message, wherein said neighbor cell information message comprises:

a set of specific parameter values; and
cell information, wherein, for each cell of a plurality of neighbor cells, said cell information comprises:
at least one specific parameter value for a first parameter, and
an index for a second parameter, said index indicating which value of said set of specific parameter values is used for said second parameter; and

means for associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell.

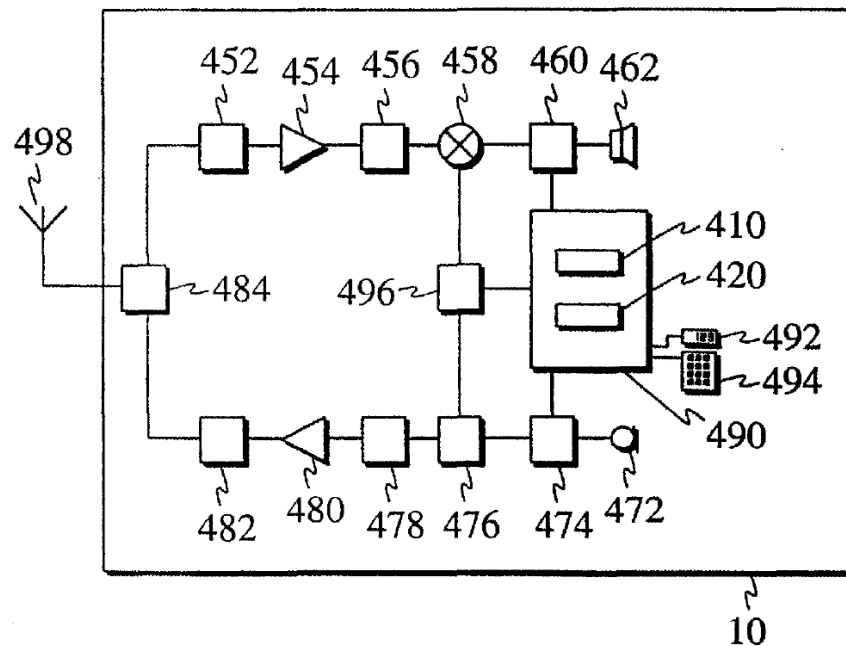


Fig. 7

The specification discloses a mobile station that includes a receiver and a transmitter. The receiver portion comprises elements 452, 454, 456, 458, 460, and 462, the last of which is “an earpiece 462 or a loudspeaker 462 for producing the audible received signal.” ’9923 Patent at 6:20–28. The mobile station also comprises “an antenna 498, an oscillator block 496, a control block 490, a display 492 and a keypad 494.” *Id.* at 6:33–36. The specification continues that the mobile station “further comprises at least . . . *means 410 for receiving a neighbor cell information message.*” *Id.* at 6:41–44 (emphasis added). “Preferably the *means 410* and 420 are *realized using software programs* stored in a memory element of a control block 490 of the mobile communication means 10, the programs being *executed by a microprocessor of the control block 490.*” *Id.* at 6:57–61 (emphasis added).

Accordingly, the structure “clearly link[ed]” to the claimed function is the “microprocessor of the control block 490,” which executes the function of “receiving a neighbor cell information message.” *See Telcordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1376 (Fed. Cir. 2010) (“[T]he written description must clearly link or associate structure to the claimed function.”). Contrary to Plaintiff’s proposal, no such linkage exists for the other components disclosed in Figure 7 and the accompanying description. *See Asyst Techs., Inc. v. Empak, Inc.*, 268 F.3d 1364, 1369–70 (Fed. Cir. 2001) (“Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations.”). For instance, the disclosure of a microphone 472 and a loudspeaker 462, evidently for voice calls, weighs against finding that the general purpose components in Figure 7 are linked to the function of receiving a neighbor cell information message.

Where, as here, the corresponding structure is a general purpose computer, the specification generally must disclose an algorithm for performing the claimed function. *See Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1337 (Fed. Cir. 2014) (explaining that “to meet the definiteness requirements of 35 U.S.C. § 112, second paragraph,” the specification “must disclose some algorithm; it cannot merely restate the function recited in the claim”).

However, there is an exception to the general rule requiring an algorithm. Specifically, when the corresponding structure is a general purpose computer, an algorithm is required *unless* the recited function can be achieved by any general purpose computer without special programming. *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming. As such, it was not necessary to disclose more structure than the general purpose processor that performs those functions.”).

In *Katz*, the Federal Circuit held that the term “analysis structure for receiving and processing said caller data signals” was not indefinite even though only a general purpose processor was disclosed for the “receiving” and “processing” functions. *See id.* at 1314, 1316. However, the Court further held that other claim language containing the term “receiving” was indefinite where the claim also included the additional limitation “based on a condition coupling an incoming call to the operator terminal, the processing means visually displaying the customer number data.” *Id.* at 1315. The Court explained that this term was indefinite because the specification did not disclose an algorithm corresponding to this latter function. *Id.*

Here, the “receiving a neighbor cell information message” function is more akin to the receiving function held not indefinite in *Katz* than the function held indefinite. *See id.* The function here requires the microprocessor to have no more capability than what is required to receive the message. The limitation does not specify any further action to be performed on the neighbor cell information message once it is received. Thus, “receiving a neighbor cell information message” is a “receiving” function that can be carried out by a general purpose computer without special programming.

The Court therefore holds that for the term **“means for receiving a neighbor cell information message,”** the function is **“receiving a neighbor cell information message,”** the corresponding structure is **“a microprocessor of control block 490; and equivalents thereof,”** and **no algorithm is required**. Accordingly, Defendants’ indefiniteness challenge is rejected.

B. “means for associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell” (Claim 11)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>Function: “associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell”</p> <p>Structure: “a microprocessor (6:57–61; Fig. 7) configured to use a parameter (or set of parameters) specified by an index (or pointer) for a parameter of a neighbor cell¹ (2:15–28; 2:35–43; 3:4–26; 4:11–5:17; 5:35–46; 7:39–49; Figs. 2–5), and equivalents thereof”</p>	<p>Indefinite</p> <p>This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell”</p> <p>Structure: No corresponding structure (algorithm) disclosed</p>

The parties agree that this term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6 but disagree as to the structure disclosed in the specification. Plaintiff asserts that “[t]he algorithm disclosed for performing this function is simple: using the parameter value specified by the index for the second parameter.” Docket No. 304 at 15. Further, Plaintiff submits, “multiple passages [in the specification] confirm that the pointer or index may specify a *set* of specific parameter values.” Docket No. 277 at 11 (citing ’9923 Patent at 3:23–26 & 5:35–46).

Defendants contend that the claim is indefinite because the specification clearly links the claimed function to the “means 420” shown in Figure 7, but “the specification fails to disclose any algorithm that describes *how* the software performs that function.” Docket No. 288 at 26.

¹ Plaintiff previously proposed to “relate” a parameter specified by an index “to” a parameter of a neighbor cell rather than to “use . . . for.” Docket No. 245, Ex. A at 1.

Defendants argue that the figures cited by Plaintiff show only the content of the neighbor cell information messages and not the algorithm by which “a general purpose computer is to go about using, accessing, or associating the data *within* the message.” *Id.* Defendants further argue that Plaintiff’s proposed corresponding structure, which incorporates a function that “merely us[es] a parameter,” “is a drastic expansion from the claimed function that is limited to ‘associating a specific value.’” *Id.* at 29. Finally, Defendants criticize Plaintiff’s proposed structure because it “impermissibly broadens ‘a specific value’ to mean ‘a set of parameters.’” *Id.* at 30.

As explained above in conjunction with the previous disputed term, the specification discloses a mobile station that comprises, among other things, “control block 490.” ’9923 Patent at 6:33–36. The specification continues that the mobile station “further comprises at least . . . means 420 for associating a value of said set of parameter values indicated by one of said second values with the corresponding parameter of a neighbor cell.” *Id.* at 6:41–54 (emphasis added). “Preferably the means 410 and 420 are realized using software programs stored in a memory element of a control block 490 of the mobile communication means 10, the programs being executed by a microprocessor of the control block 490.” *Id.* at 6:57–61 (emphasis added). Accordingly, the structure “clearly link[ed]” to the claimed function is the “microprocessor of control block 490,” which executes the function of “associating a value of said set of parameter values indicated by one of said second values with the corresponding parameter of a neighbor cell.” *See Telcordia Techs., Inc.*, 612 F.3d at 1376.

As discussed above with respect to the “means for receiving” term, where the corresponding structure is software operating on a general purpose computer, the specification generally must disclose an algorithm for performing the claimed function. *See Augme*, 755 F.3d

at 1337. Mere disclosure of inputs, without more, is insufficient to constitute an algorithm. *See Ibormeith IP, LLC v. Mercedes-Benz USA, LLC*, 732 F.3d 1376, 1382 (Fed. Cir. 2013) (“Table 10 merely lists inputs without specifying any single formula or function or algorithm defining the contribution of any of the inputs to a computation.”). However, the patentee need not disclose every conceivable detail or implementation of an algorithm, so long as some algorithm is disclosed. *See Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011) (“[T]he amount of detail that must be included in the specification depends on the subject matter that is described and its role in the invention as a whole, in view of the existing knowledge in the field of the invention.”). Further, “the algorithm may be expressed in any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure.” *Augme*, 755 F.3d at 1337 (internal quotation marks omitted).

Here, the specification repeatedly explains that a neighbor cell value is associated with a set of values by using a “pointer.” *See, e.g.*, ’9923 Patent at 2:35–43 (“The length of a neighbor cell information message . . . can be considerably shortened by . . . specifying at least some repetitive values only once, and replacing the occurrences of the value with a pointer to the single specification of the value.”); *id.* at 3:15–21 (“[V]alues of the particular parameter used in the neighboring cells are placed in a table, and references to a value of this parameter are replaced by a pointer such as an index to the table, which pointer specifies which of the entries in the table is to be used.”); *id.* at 5:35–46, 2:15–28, 5:6–17. Thus, the corresponding structure is a microprocessor configured to specify a parameter or set of parameters by using an index or a pointer.

Defendants argue that the claim is invalid because the patent discloses only inputs but no algorithm for how to use those inputs. However, the alleged inputs, the relationships between those inputs, and the method by which they are to be applied together are all disclosed in the specification. The comprehensive disclosure of the index and pointer system provides ample structure for the claimed function. Accordingly, Defendants' indefiniteness arguments are rejected.

The Court holds that for the term **“means for associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell,”** the function is **“associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell,”** and the corresponding structure is **“a microprocessor of control block 490 configured to indicate a parameter value of a neighbor cell by using an index, or a pointer, to identify a parameter value, or set of parameter values; and equivalents thereof.”**

DISPUTED TERMS IN THE '019 PATENT

The '019 Patent, titled “Reducing Interference in Inter-Frequency Measurement,” issued on October 26, 2004 and bears a priority date of February 18, 2000. The Abstract of the '019 Patent states:

A method for defining measurement gaps in a wireless telecommunications system comprising at least one base station and several wireless terminals. The telecommunications system comprises defining measurement patterns for terminals, which measurement patterns set locations of gaps used for measurements in a time-slot frame, and the base station comprises a transmitter for transmitting the measurement patterns to the corresponding terminals. In the method, measurement patterns are defined for the terminals, setting the locations of the gaps used for measurements in a time-slot frame, the measurement patterns

are transmitted through the base station to the corresponding terminals and various delays are defined for the measurement patterns of the terminals so that the gaps of different terminals are in substantially different locations in the time-slot frame.

A. “processing means for arranging gaps in a time-slot frame according to the measurement pattern definitions” (Claim 11)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>Function: “arranging gaps in a time-slot frame according to the measurement pattern definitions”</p> <p>Structure: “a processor, controller, or application specific integrated circuit (10:34–52; Fig. 6) configured to apply transmission gap length (TGL), transmission gap distance (TGD), transmission gap pattern length (TGPL), and/or transmission gap period repetition count (TGPRC) parameters (5:53–67; 6:1–19; 6:20–7:3; 7:31–9:5; Fig. 3; Fig. 4A; Fig. 4B; Fig. 5), and equivalents”</p>	<p>Indefinite</p> <p>Function: “arranging gaps in a time-slot frame according to the measurement pattern definitions”</p> <p>Structure: No corresponding structure (algorithm) disclosed</p>

The parties agree that this term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6 but disagree as to the structure disclosed in the specification. Plaintiff argues that the specification provides adequate structure for arranging gaps in a time-slot frame by disclosing transmission gap parameters that are well known to persons of skill in the art. Docket No. 305 at 4. Further, Plaintiff argues, the specification discloses a “processing means 630” that can be a processor, controller, or ASIC (Application Specific Integrated Circuit). Docket No. 277 at 16.

Defendants respond that the term is indefinite because “[t]he disclosure of various parameters that may be *used* by an algorithm does not disclose *how* the algorithm uses the

parameters, *i.e.*, it does not disclose the algorithm necessary to carry out the claimed function.” Docket No. 288 at 3. Defendants also criticize Plaintiff’s proposed construction because it introduces a new function and imports as limitations the parameters associated with the measurement pattern definition from a preferred embodiment. *Id.* at 4–5.

Claim 11 of the ’019 Patent recites (emphasis added):

11. A terminal in a wireless telecommunications system comprising:
 a receiver for receiving measurements pattern definitions made by the telecommunications system; and
processing means for arranging gaps in a time-slot frame according to the measurement pattern definitions, wherein
 the processing means are also arranged to set for the measurement pattern definition a delay according to the measurement pattern definitions.

The “processing means” corresponds to the “processing means 630” disclosed in the specification. *See* ’019 Patent at 10:34–41 (“[T]he terminal of the invention . . . comprises . . . processing means 630 for arranging the gaps into the time-slot frame according to the measurement pattern definitions . . .”).

Furthermore, the specification discloses sufficient explanation for how the terminal translates the received measurement pattern definitions into arranged gaps within a time-slot frame. The specification defines various parameters that make up the measurement pattern definitions, such as transmission gap length (TGL), transmission gap distance (TGD), transmission gap pattern length (TGPL), and transmission gap period repetition count (TGPRC). *See id.* at 5:46–64. For instance, TGL is defined as “how long the gap is as a number of time-slots” and TGD “is the distance between two consecutive gaps indicated as a number of time-slots.” *Id.* These definitions are also depicted graphically in Figure 3. In effect, each of these disclosed definitions is an instruction on how to use the numerical value of the defined parameter

to arrange a pattern of gaps in a frame. Moreover, the specification provides examples of several gap arrangements given their respective combinations of definition parameter values. *See id.* at Fig. 5. The written description also provides a walk-through of how those arrangements are calculated. *See id.* at 7:31–8:51. Accordingly, the specification provides ample structure to perform the claimed function and Defendants’ indefiniteness arguments are rejected.

However, the Court rejects Plaintiff’s inclusion of “and/or” language. The parameters are defined without any indication that using only one or more is sufficient. Plaintiff submits that their “proposal is supported by the fact that TGD and TGPRC parameters are not identified in the measurement pattern definitions of Figure 5.” Docket No. 277 at 15 n.2. Yet, the TGPRC parameter allegedly absent from Figure 5 is addressed in the accompanying written description, which suggests that the table in Figure 5 depicts only a portion of a full measurement period TGPRC. *See* ‘019 Patent at 7:43–45.

The specification does support Plaintiff’s contention that the TGD parameter will not be used in every instance. For example, the specification suggests that the TGD parameter may be relevant only when a transmission gap pattern includes more than one gap. *See id.* at 5:56–58 (defining TGD as “the distance between two consecutive gaps”); *id.* at 5:58–60 (defining “transmission gap pattern length” as “the number of consecutive frames which comprise *one or two gaps*”) (emphasis added); *id.* at Fig. 5 (showing example transmission gap patterns which include only one gap per TGPL and which are not described by any TGD values).

The Court therefore finds that for the term **“processing means for arranging gaps in a time-slot frame according to the measurement pattern definitions,”** the function is **“arranging gaps in a time-slot frame according to the measurement pattern definitions”**

and the corresponding structure is “**processing means 630 configured to apply: (1) transmission gap length (TGL), transmission gap distance (TGD), transmission gap pattern length (TGPL), and transmission gap period repetition count (TGPRC) parameters if there is more than one gap in a transmission gap pattern; or (2) transmission gap length (TGL), transmission gap pattern length (TGPL), and transmission gap period repetition count (TGPRC) parameters if there is only one gap in a transmission gap pattern; and equivalents thereof.**”

B. “the processing means are also arranged to set for the measurement pattern definition a delay according to the measurement pattern definitions” (Claim 11)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>Function: “set[ting] for the measurement pattern definition a delay according to the measurement pattern definitions”</p> <p>Structure: “a processor, controller, or application specific integrated circuit (10:34–52; Fig. 6) configured to apply a connection frame number (CFN) and transmission gap starting slot number (TGSN) parameter combination specific to the terminal (5:46–53; 6:1–19; 7:4–30; 7:31–9:5; Fig. 5), and equivalents”</p>	<p>Indefinite</p> <p>Function: “set[ting] for the measurement pattern definition a delay according to the measurement pattern definitions”</p> <p>Defendants propose the following construction for the above function: “adapt[ing] the value of the delay in the measurement pattern definition according to the measurement pattern definitions”</p> <p>Structure: No corresponding structure (algorithm) disclosed</p>

The parties agree that this term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6 but disagree as to the function and corresponding structure. With respect to function, Plaintiff contends that Defendants attempt to “rewrite the claimed function by substituting language from the specification for language in the claims.” Docket No. 305 at 5. With respect to structure, Plaintiff cites disclosure regarding “device-specific delays” and

submits that “a device-specific CFN-TGSN parameter combination is used to ‘set for the measurement pattern a delay according to the measurement pattern definition.’” Docket No. 277 at 18 (citing ’019 Patent at 7:4–8:63).

Defendants respond that applying parameters is not an algorithm, and “[Plaintiff] cannot rely on skill in the art to supply the missing algorithm.” Docket No. 288 at 7. Defendants also dispute Plaintiff’s proposal of requiring the measurement pattern definitions to be “specific to the terminal.” *Id.* Defendants argue that whereas such a limitation appears in Claims 1, 2, 5, 6, 8, and 14, no such limitation appears in Claim 11. *Id.*

No construction is necessary for the function on which the parties have agreed. Although the specification discloses “adapting the delay according to the measurement pattern definitions for the measurement pattern,” ’019 Patent at 10:34–52, Defendants have not sufficiently justified a departure from the language expressly recited in the claim.

The specification also provides sufficient structure to perform the claimed function. Specifically, the specification discloses varying the timing of compressed data transmissions among devices by varying connection frame number (CFN) and transmission gap starting slot number (TGSN). *Id.* at 3:19–26. These two parameters may be used to stagger or time-shift the gap patterns that are defined by the parameters associated with the previous disputed term. *Id.* at 7:6–30. The specification defines and provides examples of how to use the CFN and TGSN parameters. *See id.* at 5:46–53 (“CFN defines the frame into whose time-slot(s) a gap is left for measuring inter-frequency parameters. [TGSN] defines the time-slot of the 15 time-slots in the frame in question, from which the gap starts.”); *id.* at Fig. 5. The specification further explains that “processing means 630” is used to “adapt[] the delay according to the measurement pattern

definitions for the measurement pattern.” *Id.* at 10:34–41. Accordingly, Defendants’ indefiniteness arguments are rejected.

As to the proper structure for this term, Plaintiff has not adequately justified a requirement that the disclosed parameter combinations be “specific to the terminal.” The disputed term is directed toward setting a delay for a terminal according to the measurement pattern definitions received by that terminal. Plaintiff has not established that the claim language or the specification requires that the structure for performing this function must only use measurement pattern definitions that are specific to that terminal.

The Court finds that for the term **“the processing means are also arranged to set for the measurement pattern definition a delay according to the measurement pattern definitions,”** the function is **“to set for the measurement pattern definition a delay according to the measurement pattern definition”** and the corresponding structure is **“processing means 630 configured to apply a connection frame number (CFN) and transmission gap starting slot number (TGSN) parameter combination; and equivalents thereof.”**

DISPUTED TERMS IN THE ’174 PATENT

The ’174 Patent, titled “Method for Multicode Transmission by a Subscriber Station,” issued on May 10, 2011 and bears a priority date of November 11, 2004. The Abstract of the ’174 Patent states:

In a radio communications system, several codes for transmitting messages are assigned to a subscriber station. A transmission power differential is determined between the total maximum transmission power of the subscriber station for the codes and the total transmission power of the subscriber station for the codes at the beginning of a message transmission, (the differential being respected by the subscriber station), by a first one of the codes.

A. “a transmit power difference which is to be maintained” (Claims 1 and 18) and “maintaining a previously determined transmit power difference” (Claim 9)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning; no construction necessary.	<p>“a transmit power difference which is to be maintained”:</p> <p>“an unused transmit power that is required to exist”</p> <p>“maintaining a previously determined transmit power difference”:</p> <p>“a previously determined unused transmit power that is required to exist”</p>

Plaintiff argues that the claim language expressly defines “transmit power difference.” Docket No. 277 at 20. Plaintiff also submits that “[d]etermined,’ ‘maintained,’ and ‘maintaining’ are not technical terms; their ordinary meanings are well understood, apply within the context of the asserted claims, and need not be redefined.” *Id.* at 21. Plaintiff criticizes Defendants’ proposed construction for “removing the ‘which is to be maintained’ and ‘maintaining a previously determined’ elements.” *Id.*

Defendants respond that their proposed construction “is directly from the specification’s explanation of the alleged invention.” Docket No. 288 at 9. Further, Defendants argue that construction is necessary because “[t]he term ‘a transmit power difference which is to be maintained’ is not commonly used and its meaning would not be readily apparent to lay persons.” *Id.* at 10.

Representative Claim 1 of the ’174 Patent recites (emphasis added):

1. A method for operating a radio communication system in which a subscriber station is assigned a plurality of codes for transmitting messages, comprising:
determining *a transmit power difference which is to be maintained* by the subscriber station between on one hand a total maximum transmit power of the subscriber station for the codes and on another hand a total transmit power of the

subscriber station for the codes at a start of a message transmission using a first one of the codes.

The meaning of the disputed term is readily apparent in the context of surrounding claim language. Defendants’ proposal is not more helpful in understanding the claim limitations than the existing claim language. Furthermore, Defendants’ replacement of “difference” for “unused” would tend to confuse rather than clarify the scope of the claims and is therefore rejected. No further construction is necessary.

The Court construes **“a transmit power difference which is to be maintained”** and **“maintaining a previously determined transmit power difference”** to have their **plain meaning**.

B. Claims 1, 9, and 18

Plaintiff’s Proposal	Defendants’ Proposal
Not indefinite	Indefinite

Defendants argue that “a person of ordinary skill in the art is not informed, with reasonable certainty, whether the prepositional phrase ‘at a start of a message transmission using a first one of the codes’ modifies (1) ‘a total transmit power of the subscriber station for the codes,’ (2) ‘a transmit power difference which is to be maintained,’ or (3) ‘determining a transmit power difference.’” Docket No. 287 at 15. Defendants contend that there exists a “zone of uncertainty” regarding claim scope, which varies depending on the interpretation. *Id.* at 18. Further, Defendants submit that the “specification is consistent with all three possible interpretations.” *Id.* (citing ’174 Patent at Abstract, Claim 9, 2:59–3:4, 3:52–59, 6:11–15, 6:40–49, 7:21–25 & 8:50–63).

Plaintiff responds that in a petition for *Inter Partes* Review at the United States Patent and Trademark Office, Defendants had no difficulty understanding that “the ‘transmit power difference’ is ‘determined and then maintained’ at the start of a message transmission using a first one of the codes.” Docket No. 304 at 19. Plaintiff concludes that “the correct view of the claims aligns with Defendants’ ‘maintaining interpretation.’” *Id.* at 21.

Representative Claim 1 of the ’174 Patent recites (emphasis added):

1. A method for operating a radio communication system in which a subscriber station is assigned a plurality of codes for transmitting messages, comprising:
determining a transmit power difference which is to be maintained by the subscriber station between on one hand a total maximum transmit power of the subscriber station for the codes and on another hand a total transmit power of the subscriber station for the codes *at a start of a message transmission using a first one of the codes.*

The most natural reading of these claims is that the phrase “at a start of a message transmission using a first one of the codes” modifies the immediately preceding language, “a total transmit power of the subscriber station for the codes.” Such a reading is supported by the specification, which explains that a “transmit power difference” is a difference which must be maintained between “a first and a second transmit power.” *See* ’174 Patent at 2:41–45. The first transmit power is “the total maximum transmit power of the subscriber station for the plurality of the codes.” *Id.* at 2:45–48. “The second of the two transmit powers is the total transmit power of the subscriber station for the plurality of codes *at the start of a message transmission using a first of the codes.*” *Id.* at 2:59–61 (emphasis added). When mapped to the claim language, this language from the specification shows that the disputed prepositional phrase distinguishes the “total transmit power” from the “total maximum transmit power.”

Further support for this reading is apparent elsewhere in the specification, where the patentee swapped the sentence placement of the two “total transmit powers.” *See id.* at 6:43–47 (“The transmit power difference . . . is required to exist between [(1)] *the total transmit power for the two codes DCH and EDCH at the start of the transmission of an EDCH message* and [(2)] the maximum transmit power for the two codes DCH and EDCH.” (emphasis added)); *see also id.* at 8:53–57, 8:59–63. Thus, read plainly and in light of the specification, the disputed phrase modifies “a total transmit power of the subscriber station for the codes.”

Defendants point to nothing in the specification that is inconsistent with the Court’s interpretation. The parties agree that the specification discloses that the transmit power difference is “maintained” at the start of a message transmission, *see* Docket No. 304 at 21–22; Docket No. 308 at 6, but this understanding naturally follows from the Court’s construction. The disputed language addresses how the transmit power difference is applied. The claim states that the transmit power difference is maintained between two transmit powers, one of which, as explained above, is temporally tied to “a start of a message transmission using a first one of the codes.” Thus, the transmit power difference is maintained at least at that point in time. *See* ’174 Patent at 6:47–49 (“The transmit power difference thus corresponds to an unused transmit power at the start of the transmission of an EDCH message.”).

Therefore, the Court construes Claims 1, 9, and 18 such that **the phrase “at a start of a message transmission using a first one of the codes” modifies “a total transmit power of the subscriber station for the codes.”** Accordingly, Defendants’ indefiniteness argument is rejected.

DISPUTED TERMS IN THE '820 PATENT

The '820 Patent, titled “Apparatus, System, and Method for Designating a Buffer Status Reporting Format Based on Detected Pre-Selected Buffer Conditions,” issued on November 8, 2011 and bears a priority date of November 5, 2007. The Abstract of the '820 Patent states:

An apparatus, system and method for increasing buffer status reporting efficiency and adapting buffer status reporting according to uplink capacity. User equipment is configured a [*sic*, to] monitor a usage of a plurality of buffers, detect one of a plurality of pre-selected conditions corresponding to at least one of the plurality of buffers, designate one of a plurality of buffer status reporting formats depending on the pre-selected condition detected, communicate a buffer status report to a network device in accordance with the buffer status reporting format designated. The buffer status reporting format is configured to minimize buffer status reporting overhead created by the communicating of the buffer status report.

A. “the designating unit” (Claim 12)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>“the memory, processor, and computer program code configured to designate”² (not subject to 112(6))</p> <p>Alternatively, should the Court determine this is a means-plus-function claim element subject to 35 U.S.C. 112(6):</p> <p>Function: “designating the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format”</p> <p>Structure: “a VLSI circuit, semiconductor, or processor (7:15–24, Fig. 2) configured to assign a buffer status reporting format depending on the preselected condition detected and uplink bandwidth, and/or buffer priority (Figs. 2–4; 6:1–42; 7:58–8:1; 8:17–39; 10:29–44), and equivalents”</p>	<p>Indefinite</p> <p>This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “designat[ing] the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format”</p> <p>Structure: No corresponding structure disclosed</p>

The parties dispute whether the claim should be interpreted as a means-plus-function claim, and if so, whether the specification contains sufficient corresponding structure for the claimed function. With respect to the first issue, Plaintiff submits that the disputed term does not use the word “means” and “[o]ne skilled in the art would . . . understand from the language of claim 12 that the ‘designating unit’ is a reference to the claimed processor, memory, and computer program code configured to ‘designate.’” Docket No. 277 at 24. Plaintiff argues that Claims 23 and 24, as well as prosecution history, confirm that “the designating unit” is not a

² Plaintiff previously proposed: “the memory and computer program code configured to designate.” Docket No. 245, Ex. A at 4.

separate, distinct limitation. *Id.* at 24–26. Plaintiff concludes that “[t]he fact that ‘the designating unit’ was not revised in [an] amendment [during prosecution that removed ‘a designating unit’ from the claim] is an obvious, minor error that the Court should simply correct.” *Id.* at 25–26. With respect to the second issue, Plaintiff alternatively submits that the specification discloses corresponding structure, including an algorithm. *Id.* at 27.

Defendants respond that “[t]he term ‘unit’ is a generic ‘nonce’ word that can refer to almost any element in a communications system, ‘is not recognized as the name of structure,’ and thus provides no information as to what structure or class of structures is contemplated.” Docket No. 288 at 12. As to corresponding structure, Defendants argue that “almost all the references to the term ‘designating unit’ in the specification are explicitly functional,” and “[t]he remaining references simply refer to element 260 of Figure 2, which is a generic, unadorned, square box that provides no structural information whatsoever.” *Id.* at 14.

Claim 12 of the ‘820 Patent recites (emphasis added):

12. An apparatus, comprising:
 a processor; and
 a memory including computer program code, the memory and the computer program code configured to, with the processor, cause the apparatus at least to monitor a usage of a plurality of buffers;
 detect one of a plurality of pre-selected conditions corresponding to the plurality of buffers;
 designate one of a plurality of buffer status reporting formats comprising a long buffer status reporting format and a short buffer status reporting format depending on the pre-selected condition detected; and
 communicate a buffer status report to a network device in accordance with the buffer status reporting format designated, wherein *the designating unit* is configured to designate the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format.

As an initial matter, the Court construes this term as a means-plus-function term. Although the term does not include the word “means,” it only recites the function of designating without any corresponding structure. *See Mass. Institute of Tech. & Elecs. for Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 1353–56 (Fed. Cir. 2006) (“[A] limitation lacking the term ‘means’ may overcome the presumption against means-plus-function treatment if it is shown that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” (internal quotation marks omitted)). Further, the surrounding claim language does not provide sufficient structure for the designating function. *See id.* at 1354 (noting that in some cases, further claim language can provide sufficient structure to an otherwise non-structural term).

Additionally, the Court may not “correct” the claim as Plaintiff proposes because any correction would be “subject to reasonable debate” in this instance. *See Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1357 (Fed. Cir. 2003) (“A district court can correct a patent only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.”).

The specification discloses the structure to perform the agreed-upon function, “designating the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format”—the “designating unit 260” that cooperates with an “uplink capacity detecting unit 240.” *See* ’820 Patent at 6:21–29. These “units” may be “implemented as a hardware circuit” or “implemented in software for execution by various types of processors.” *Id.* at 7:15–24. The specification also sets forth sufficient

algorithms in Figures 2–4 and the accompanying written description. *See id.* at 6:1–42, 7:58–8:1, 8:17–39, 10:29–44 & Figs. 2–4; *Ishida Co., Ltd. v. Taylor*, 221 F.3d 1310, 1316 (Fed. Cir. 2000) (noting that a patent can “disclose[] alternative structures for accomplishing the claimed function”).

Accordingly, the Court finds that **“the designating unit”** is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6, that the claimed function is **“designating the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format,”** and that the corresponding structure is **“uplink capacity detecting unit 240 and designating unit 260, which are implemented in hardware, or software, configured to perform one or more of the algorithms set forth in the ‘820 Patent at 6:1–42, 7:58–8:1, 8:17–39, 10:29–44 & Figures 2–4.”**

B. Claims 1, 12, and 24

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Not indefinite	Indefinite

Defendants argue that each of Claims 1, 12, and 24 of the ‘820 Patent is internally inconsistent, and therefore, indefinite. Taking Claim 1 as an example, Defendants explain that the claim “recites two separate conditions that are used to determine which ‘buffer status reporting format’ [(“BSR”)] to designate.” Docket No. 287 at 19. On one hand, the long-versus-short BSR designation is made “depending on the pre-selected condition detected.” *Id.* On the other hand, “the long [BSR] must be designated when there is sufficient uplink bandwidth to communicate using the long [BSR].” *Id.* (internal quotation marks omitted). Thus, Defendants contend that the claim language “provides no way to reconcile” these two conditions in the event

that they point to opposite designations. *Id.* Plaintiff responds that “the claims recite (and the specification describes) a *single* designation.” Docket No. 304 at 22.

Defendants’ two-independent-conditions interpretation is unsupported by the specification. Representative Claim 1 recites (emphasis added):

1. A method, comprising:
 - monitoring a usage of a plurality of buffers;
 - detecting one of a plurality of pre-selected conditions corresponding to the plurality of buffers;
 - designating one of a plurality of buffer status reporting formats comprising a long buffer status reporting format and a short buffer status reporting format depending on the pre-selected condition detected;* and
 - communicating a buffer status report to a network device in accordance with the buffer status reporting format designated, *wherein the designating designates the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format.*

The specification makes clear that “sufficient uplink bandwidth” is an *additional* requirement for designating the long BSR applicable only where the long BSR would already be designated based on the “pre-selected condition detected.” *See* ’820 Patent at 7:60–63, 8:20–39 (explaining that where pre-selected conditions include “detecting that one or more communication buffers include data,” “[i]f only one buffer has data, the method 400 continues by designating 450 the short [BSR],” but “if multiple communication buffers have data, then the method 400 continues by determining 440 whether there is sufficient uplink capacity to communicate a buffer status report using the long [BSR]”); *id.* at 10:7–44. In other words, even upon satisfaction of “pre-selected conditions” for selection of a long BSR, a short BSR will nonetheless be used if there is insufficient uplink bandwidth for a long BSR. *See id.* at 7:60–63, 8:20–39, 10:7–44. Thus, the conditions do not conflict because the “sufficient uplink bandwidth” condition does not apply where the “pre-selected condition detected” alone would

lead to the designation of the short BSR. *See id.* Accordingly, the Court rejects Defendants’ indefiniteness challenge.

DISPUTED TERMS IN THE ’8923 PATENT

The ’8923 Patent, titled “Control of Terminal Applications in a Network Environment,” issued on May 15, 2007 and bears a priority date of December 18, 2003. The Abstract of the ’8923 Patent states:

A mechanism and method for controlling the rights and/or behavior of applications in a terminal, especially in a mobile terminal, are disclosed. At least some of the messages generated by an application residing in the terminal and destined for a communication network are diverted to an independent controlling entity also residing in the terminal. In the controlling entity, the messages are controlled before being transmitted to the network. Depending on the application and its behavior in the terminal, the control entity may modify the messages or even prevent their sending to the network. The modification may include inserting control data, such as a digest, which can be used to authenticate the application.

A. “a diverting unit configured to divert a message of the messages sent from the application program and destined for the communication network” (Claim 24)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning; no construction necessary.	“a diverting unit configured to redirect a message of the messages sent from the application program and destined for the communication network from the path it would have taken if not redirected on to an alternate path”

Although Plaintiff “does not dispute that ‘diverting’ and ‘redirecting’ have a consistent meaning,” Docket No. 305 at 8, Plaintiff argues that Defendants’ proposal further “appends language about ‘paths’ that finds no support in the intrinsic record.” Docket No. 277 at 28. Plaintiff urges that “[n]othing in the intrinsic record of the ’8923 patent preordains primary and ‘alternate’ *physical* paths for particular messages.” *Id.* at 29. “For example,” Plaintiff submits,

“a message could be logically ‘diverted’ by copying it to a location where a controlling entity can examine it.” *Id.*

Defendants respond that when a message is diverted, “the message is no longer following the path it would have taken if it were not redirected.” Docket No. 288 at 17. As to Plaintiff’s suggestion of “logical” paths as opposed to “physical” paths, Defendants respond that the specification contains no support for any such distinction. *Id.* at 18.

Claim 24 of the ’8923 Patent recites (emphasis added):

24. A terminal for a communication system, the terminal comprising:
 an application program configured to send messages towards a communication network; and
 a diverting unit configured to divert a message of the messages sent from the application program and destined for the communication network to a controlling entity residing in the terminal,
 wherein the controlling entity is configured to control, based on the message and before the message is transmitted to the communication network, whether the application program behaves in a predetermined manner in the communication terminal, and
 wherein the terminal is a terminal of a communications system.

Neither the written description nor the figures in the specification provides adequate support for Defendants’ proposal of a change in “path.” Instead, the specification and the surrounding claim language explain that “to divert” refers to handling of the message by “a controlling entity residing in the terminal.” *See* ’8923 Patent at 1:59–2:11 (“At least some of the outbound messages generated by an application in a terminal are diverted to the controlling entity on their way from the application to the network. . . . Based on the evaluation, the control entity then returns the message intact or in a modified form.”). To the extent that the parties dispute a distinction between logical and physical diversion—a distinction unaddressed in the specification—such a dispute is properly a matter for infringement analysis to be performed by

the fact finder. *See PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998) (“[A]fter the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact.”). Thus, the Court rejects Defendants’ proposed construction and finds that no further construction is necessary.

The Court therefore construes **“a diverting unit configured to divert a message of the messages sent from the application program and destined for the communication network”** to have its **plain meaning**.

B. “based on the message” (Claim 24)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning; no construction necessary.	“based on the contents of the message”

Plaintiff argues that Defendants’ construction is too narrow because the specification discloses that “messages . . . include not only data content (i.e., a ‘payload’), but additional information such as the ‘identifier of the application’ that sent it.” Docket No. 277 at 30 (quoting ’8923 Patent at 4:51–53). Thus, Plaintiff argues, “‘examination’ [of the messages] could entail inspecting characteristics of the message other than its ‘content’ (e.g., its timing, origin, destination, size, etc.).” Docket No. 305 at 9. Defendants argue that the term is directed to only one of two embodiments disclosed in the specification. *See* Docket No. 288 at 19–20 (“[T]he specification sets out two distinct embodiments: one where a controlling entity makes decisions based on *an examination of a message* sent by an application; the other where the controlling entity makes decisions based on analysis of the *behavior of the application itself*.”).

The specification explains that the controlling entity may evaluate the behavior of the application. *See* '8923 Patent at 1:59–2:3 (“The controlling entity may even prohibit the sending of the message, if it detects that the application has no pertinent rights or that the application is not behaving, as it should.”). The references in the specification to the rights or behaviors of an application, as opposed to the content of a message, suggest that examination of the content of a message is not required. Furthermore, the embodiment cited by Defendants where “the trusted agent . . . examines the request” is insufficient to support Defendants’ proposal. *See id.* at 4:46–5:4. Even if “examin[ing] the request” were deemed to require using the content of a message, this is merely a feature of a particular preferred embodiment and should not be imported into the claim. *See Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998). Accordingly, the Court rejects Defendants’ proposed construction and finds that no further construction is necessary.

The Court therefore construes “**based on the message**” to have its **plain meaning**.

CONCLUSION

For the foregoing reasons, the Court hereby **ADOPTS** the claim constructions as set forth above. For ease of reference, the Court’s claim interpretations are set forth in a table in Appendix A. Furthermore, Defendants’ Motion for Summary Judgment of Invalidity for Indefiniteness (Docket No. 287) is **DENIED**.

So ORDERED and SIGNED this 9th day of March, 2015.

A handwritten signature in black ink, appearing to read 'Leonard Davis', written over a horizontal line.

**LEONARD DAVIS
UNITED STATES DISTRICT JUDGE**

APPENDIX A

Terms, Phrases, or Clauses	Court's Construction
'9923 "means for receiving a neighbor cell information message"	<p>Function (agreed): "receiving a neighbor cell information message"</p> <p>Corresponding Structure: "a microprocessor of control block 490; and equivalents thereof"</p> <p>No algorithm is required</p>
'9923 "means for associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell"	<p>Function (agreed): "associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell"</p> <p>Corresponding Structure: "a microprocessor of control block 490 configured to indicate a parameter value of a neighbor cell by using an index, or a pointer, to identify a parameter value, or set of parameter values; and equivalents thereof"</p>

<p>'019 “processing means for arranging gaps in a time-slot frame according to the measurement pattern definitions”</p> <p>(Claim 11)</p>	<p>Function (agreed):</p> <p>“arranging gaps in a time-slot frame according to the measurement pattern definitions”</p> <p>Corresponding Structure:</p> <p>“processing means 630 configured to apply: (1) transmission gap length (TGL), transmission gap distance (TGD), transmission gap pattern length (TGPL), and transmission gap period repetition count (TGPRC) parameters if there is more than one gap in a transmission gap pattern; or (2) transmission gap length (TGL), transmission gap pattern length (TGPL), and transmission gap period repetition count (TGPRC) parameters if there is only one gap in a transmission gap pattern; and equivalents thereof”</p>
<p>'019 “the processing means are also arranged to set for the measurement pattern definition a delay according to the measurement pattern definitions”</p> <p>(Claim 11)</p>	<p>Function:</p> <p>“to set for the measurement pattern definition a delay according to the measurement pattern definition”</p> <p>Corresponding Structure:</p> <p>“processing means 630 configured to apply a connection frame number (CFN) and transmission gap starting slot number (TGSN) parameter combination; and equivalents thereof”</p>
<p>'174 “a transmit power difference which is to be maintained”</p> <p>(Claims 1 & 18)</p> <p>“maintaining a previously determined transmit power difference”</p> <p>(Claim 9)</p>	<p>Plain meaning</p>

'174 Claims 1, 9, 18	<p>The phrase “at a start of a message transmission using a first one of the codes” modifies “a total transmit power of the subscriber station for the codes.”</p> <p>Not indefinite</p>
<p>'820 “the designating unit”</p> <p>(Claim 12)</p>	<p>Function (agreed):</p> <p>“designating the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format”</p> <p>Corresponding Structure:</p> <p>“uplink capacity detecting unit 240 and designating unit 260, which are implemented in hardware, or software, configured to perform one or more of the algorithms set forth in the '820 Patent at 6:1–42, 7:58–8:1, 8:17–39, 10:29–44 & Figures 2–4”</p>
'820 Claims 1, 12, 24	Not indefinite
<p>'8923 “a diverting unit configured to divert a message of the messages sent from the application program and destined for the communication network”</p> <p>(Claim 24)</p>	Plain meaning
<p>'8923 “based on the message”</p> <p>(Claim 24)</p>	Plain meaning